REMARKS

Applicants add new claim 23. Accordingly, claims 1, 3, 5-9, 11, 13, 15-18 and 20-23 are

all the claims pending in the application. Applicants amend claim 5. New claim 23 is at least

supported by page 10, lines 10-13. No new matter is added.

Allowable subject matter

Applicants note that the Examiner has indicated that claims 21 and 22 are allowable.

Applicants do not acquiesce to the Examiner's reasons for allowance.

Claim objections

Claims 21 and 22 are objected to because of minor informalities.

In view of the amendment to claims 21 and 22 submitted herewith, Applicants

respectfully request the Examiner to withdraw the objection to the claims.

Claim rejections under 35 U.S.C. § 112, first paragraph

Claim 5 is rejected under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply

with the enablement requirement.

In view of the self-explanatory claim amendments to claim 5 submitted herewith,

Applicants respectfully request the Examiner to withdraw this rejection of claim 5.

Claims rejection under 35 U.S.C. § 103

Claims 1, 3, 5-9, 11, 13 and 15-18 and 20 are rejected under 35 U.S.C. § 103(a) as

allegedly being unpatentable over Kwan et al. ("Implementation of DSP-RAM: An architecture

for parallel Digital Signal Processing in Memory," 2001) in view of Davidson et al. (U.S. Patent:

4,868,867; hereinafter "Davidson"). Applicants traverse the rejection for at least the following

reasons.

In the Amendment filed April 6, 2009, Applicants submitted that Kwan and Davidson do

not teach or suggest "the evaluating the index comprises comparing the index of each optimal

group code vector with indices of other optimal group code vectors and wherein the comparing

of the index of each optimal group code vector is different from a comparison between the group

code vectors". In response, the Examiner states that:

> Kwan determines a plurality of optimal group code vectors (one at each
> processing element within the DSP) by evaluating index positions with a
> scoring algorithm (section 3.3, Pages 344-345). Next these optimal code
> vectors within each processing element and each having an associated
> index (section 3.3, Page 344) are evaluated by performing an overall best
> comparison or comparing each indexed vector's score with the others in
> the group. Overall then, in the case of determining the local best within
> each PE, Kwan uses a scoring algorithm that evaluates each index
> position and in the second case of determining the global best code
> vector, Kwan uses an algorithm that compares vector indexes with
> respect to a global score comparison (Section 3.3, Page 345) ...
> Therefore, since Kwan's local best algorithm does involve the
> comparison of indices via their assigned contents and the global best
> evaluation analyzes the best indices with respect o an overall best score,
> this arguments has been fully considered, but is not convincing.

Applicants respectfully disagree for at least the following reasons.

For example, in section 3.3, Kwan discloses determining the nearest match of a given

data vector with the stored codewords and then, instead of sending the code vector, sending the

indices of the matching codeword to the receiver. The receiver uses the index to retrieve one codeword from a copy of the same codebook. As such, Kwan merely discloses determining nearest match between given data vector and the stored codeword, and does not teach or suggest comparing the index of each optimal group code vector with indices of other optimal group code vectors and wherein the comparing of the index of each optimal group code vector is different from a comparison between the group code vectors. That is, according to the claimed invention, the indices are compared with each other; this claimed feature is different from a comparison between the group code vectors.

Furthermore, Kwan discloses that each PE would compute the L2 norm between the incoming data vector, distributed over the broadcast bus, and its set of stored codewords. Once the norm has been computed with respect to the codewords in each PE, the algorithm would proceed to determine the lowest error match within each PE. Once this was done, the broadcast bus could be used to find the closest matching codeword over all PEs (page 0345). However, Kwan again merely discloses finding the closest matching code word over all PEs and does not teach or suggest anything about comparing indices as recited in the claimed invention.

In addition, Applicants respectfully submit that since Kwan discloses analyzing the code vector already in sequence within the processor on pages 344-345, as acknowledged by the Examiner, there would be no rationale for providing the feature of comparing the indices to ensure conformity with the linear processes. In response to the above argument, the Examiner on page 5 of the Office Action contends that the limitation "to ensure conformity with the linear process" is an intended use to achieve a particular result. However, contrary to the Examiner

assertion, Applicants submit that in the argument presented above, Applicants are not claiming

an intended use, but are pointing out that why Kwan does not teach or suggest the features of

comparing the indices and why it would not have been obvious for Kwan to teach or suggest the

claimed feature of comparing the indices. Specifically, since Kwan already analyzes the vectors

in sequence with in the processor, there would no rationale for comparing the indices.

Davidson does not disclose these features missing in Kwan.

In view of the above, Applicants submit that claim 1 is allowable over the cited

references.

Claim 7

Applicant respectfully submits that claim 7 recites subject matter analogous to claim 1,

and therefore is allowable for at least the analogous reasons claim 1 is allowable.

Claims 3, 5-6, 8, 9, 11-18 and 20

Applicant submits that claims 3, 5-6, 8, 9, 11-18 and 20 depend from either claim 1 or 7,

and therefore are allowable at least by virtue of their dependency.

New claims

Applicants submit that claim 23 depends from claim 1, and therefore is allowable at least

by virtue of its dependency and the additional features recited therein.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed

to be in order, and such actions are hereby solicited. If any points remain in issue which the

Examiner feels may be best resolved through a personal or telephone interview, the Examiner is

kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue

Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any

overpayments to said Deposit Account.

Respectfully submitted,

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